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Sent: Monday, January 10, 2011 10:04 AM
To: Hilton.Joy@epamail.epa.gov; pitt.brian@epamail.epa.gov; janson.roger@epamail.epa.gov
Subject: Fw: Dry Weather Flow Data

----- Forwarded by Michael Wagner/R1/USEPA/US on 01/10/2011 10:03 AM -----

From: "Peter H. Rice" <phrice@cityofportsmouth.com>
To: Michael Wagner/R1/USEPA/US@EPA
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Date: 01/07/2011 03:36 PM
Subject: RE: Dry Weather Flow Data

Attached please find an evaluation prepared by our consultant relative to dry weather flows at the Peirce Island Wastewater Treatment Facility. It must be noted that the Peirce Island Facility is unique in that the flow data reflects a plant that was designed as a CSO abatement facility as part of its upgrade to advanced primary treatment in the early 1990s. Much of the sustained peak flow contains what would typically have been discharged as a CSO had it not been pumped to the plant. Therefore, because of the combined nature of the flow, and the unique manner in which the plant was designed, it is necessary to disaggregate the wet and dry weather components of the total flow received at the WWTF. The methodology and data used in this analysis is attached to this e-mail.

In addition, it is important to note that the flows presented here are historic in nature and do not reflect the recently completed sewer separation projects and future separation that is required by the City's Consent Decree as part of its ongoing sewer separation program. These efforts along with the City's policy of providing drain laterals for sump pumps will continue to reduce sustained peak flows at the plant.

Based on our consultant's evaluation, the peak sustained average dry weather flow is 7.9 mgd and depending upon how the data is viewed likely ranges between 7.5 and 8.9 mgd. As we move forward with our pilot program and subsequent treatment facility design the flow capacity will be refined. One of our pilot testing goals is to determine the maximum rates of flow through the various technologies under consideration. Upon completion of the pilot effort we will be able to determine whether additional tankage at Peirce Island or flow shedding to Pease will be necessary.

We look forward to working with the EPA to finalize these critical design criteria as we move forward on our pilot program and subsequent treatment facility design.

Please call if you have any questions or require additional information.

Sincerely,

Peter Rice, P.E.
City Engineer

Portsmouth, NH[attachment "Peirce Island Flows total (2).pdf" deleted by Michael Wagner/R1/USEPA/US] [attachment "percentileflow.pdf" deleted by Michael Wagner/R1/USEPA/US] [attachment "dryflow.pdf" deleted by Michael Wagner/R1/USEPA/US] [attachment "methodology.pdf" deleted by Michael Wagner/R1/USEPA/US]